## **Program of Study**

## Career Field: Industrial, Manufacturing, and Engineering Systems



Career Cluster: Manufacturing
Career Pathway: Production



## **Central Community College**

DEGREE: Machine Tool Technology

http://www.cccneb.edu/igsbase/igstemplate.cfm?SRC=SP&SRCN=programchart2&GnavID=20&SnavID=&TnavID=&cccProgramID=107&LS=&PS=&KS=

|                           | GRADE     | ENGLISH                            | МАТН   | SCIENCE                 | SOCIAL<br>STUDIES   | GENERAL ELECTIVES  |                                       | PATHWAY ELEC  | CTIVE COURSES              | EXTENDED LEARNING<br>SCHOOL/COMMUNITY  |                              |
|---------------------------|-----------|------------------------------------|--|-------------------------|---|--|---------------------------------------|---|----------------------------|--|------------------------------|
| HIGH SCHOOL               | 9         | English/Language<br>Arts I         | Algebra I  | Physical Science        | Geography   | World Languages and Cultures Physical Education Health Education Entrepreneurship Information Technology App. I Automotive Mechanics Cabinetmaking Programming I Electroncis Welding |                                       | Intro to  Manufacturing/Mechatronics  Manufacturing Woods  Manufacturing Metals |                            | School Activities: SkillsUSA, OPPD/NPPD Power Drive, FFA, Math Club, MATHCOUNTS  Community Activities: Learn to repair machinery, Learn to use the latest tools for home repair, Tour a factory, Part time employment available within this career cluster, Internships available within this career cluster |                              |
|                           | 10        | English/Language<br>Arts II        | Geometry   | Biology                 | World History   |  |                                       |   |                            |  |                              |
|                           | 11        | English/Language<br>Arts III       | Algebra II   | Chemistry               | American History  |  |                                       |   |                            |  |                              |
|                           | 12        | English/Language<br>Arts IV        | Intro to Statistics<br>Descrete Math<br>Pre-Calc     | Physics                 | American Government or Economcis  |  |                                       |   |                            |  |                              |
| CENTRAL COMMUNITY COLLEGE |           | COMMUNICATIONS                     | MATH/ SCIENCE  | PERSONAL<br>DEVELOPMENT | SOCIAL/ BEHAVIORAL<br>SCIENCES  | ENDORSEMENT<br>OPTION: SELECT 1  | MAJOR COURSES                         |   |                            |  |                              |
|                           | 13 and 14 | Select 3 hours from the following: | Select 3 hours from the following:                   | Nutrition               | Select 3 hours from the following:  | Advanced CNC<br>Applications   | Basic Engine<br>Lathe I               | Basic Milling<br>Machine Work I   | Heat Treat &<br>Metallurgy | Computer<br>Numerical<br>Control Lathe   | CAD/CAM<br>Operations        |
|                           |           |                                    | Occupational Math<br>Business Math<br>Technical Math |                         | American Government Microeconomics Human Relations Economic Understanding | Plastic Mold<br>Making   | Computer<br>Numerical<br>Control Mill | Blueprint Read for Industry   | Instruments & Measurements | Fundamentals of Design   | CNC Sinker EDM<br>Technology |
|                           |           |                                    |  |                         |   | Tool & Die   | CNC Wire EDM<br>Technology            | Intro to<br>AutoCAD   |                            |  |                              |
|                           |           |                                    |  |                         |   |  |                                       |   |                            |  |                              |